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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/632,861	08/04/2003	Shin-Ichi Nakao	116772	4617
25944 75	10/19/2005		EXAMINER	
OLIFF & BERRIDGE, PLC P.O. BOX 19928			. LE, HOA T	
ALEXANDRIA	-		ART UNIT	PAPER NUMBER
			1773	

DATE MAILED: 10/19/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

			<i>V</i> 2				
	Application No.	Applicant(s)					
	10/632,861	NAKAO ET AL					
Office Action Summary	Examiner	Art Unit					
	H. T. Le	1773					
The MAILING DATE of this communication app Period for Reply	ears on the cover sheet with the c	orrespondence addre	9\$\$				
A SHORTENED STATUTORY PERIOD FOR REPLY WHICHEVER IS LONGER, FROM THE MAILING DA  - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication.  - If NO period for reply is specified above, the maximum statutory period w  - Failure to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUNICATION 6(a). In no event, however, may a reply be tim rill apply and will expire SIX (6) MONTHS from cause the application to become ABANDONE	N. nely filed the mailing date of this comn D (35 U.S.C. § 133).					
Status							
1) Responsive to communication(s) filed on <u>04 Au</u>		o					
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<ol> <li>Since this application is in condition for allowar closed in accordance with the practice under E</li> </ol>			ients is				
closed in accordance with the practice under £	x parte Quayle, 1900 C.D. 11, 40	55 O.G. 215.					
Disposition of Claims							
4) Claim(s) 3.4.7.9-11 and 16-22 is/are pending in	n the application.						
4a) Of the above claim(s) is/are withdrawn from consideration.							
5) Claim(s) is/are allowed.							
·	6)⊠ Claim(s) <u>3,4,7,9-11 and 16-22</u> is/are rejected.						
7) Claim(s) is/are objected to.							
8) Claim(s) are subject to restriction and/or	election requirement.						
Application Papers		,					
9) The specification is objected to by the Examine	r.						
10)☐ The drawing(s) filed on is/are: a)☐ accepted or b)☐ objected to by the Examiner.							
Applicant may not request that any objection to the	drawing(s) be held in abeyance. See	e 37 CFR 1.85(a).					
Replacement drawing sheet(s) including the correcti	on is required if the drawing(s) is obj	ected to. See 37 CFR	1.121(d).				
11)☐ The oath or declaration is objected to by the Ex	aminer. Note the attached Office	Action or form PTO-	·152.				
Priority under 35 U.S.C. § 119							
12) Acknowledgment is made of a claim for foreign a) All b) Some * c) None of:	, ,	-(d) or (f).					
1. Certified copies of the priority documents		N1-					
2. Certified copies of the priority documents	• •						
3. Copies of the certified copies of the prior	-	ed in this National Sta	age				
application from the International Bureau  * See the attached detailed Office action for a list of the section for a list	* **	d					
See the attached detailed Office action for a list of	or the certified copies not receive	·u.					
Attachment(s)							
1) Motice of References Cited (PTO-892) 2) D Notice of Draftsperson's Patent Drawing Review (PTO-948)	4) 🔲 Interview Summary Paper No(s)/Mail Da						
2) Notice of Draftsperson's Patent Drawing Review (PTO-946)  3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  Paper No(s)/Mail Date	5) Notice of Informal P		52)				

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## **DETAILED ACTION**

1. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

## Claim Rejections - 35 USC § 103

- 2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 3. Claims 3, 4, 7, 9-11, and 16-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over the Naoki patent (JP 2001-000860) in view of the Dennison patent (US 5,476,665).\*

The Naoki patent teaches a method of graft polymerizing a porous particle by plasma irradiation under a pressure of 0.05 to 0.1 Torr (see paragraph [0009], [0025, [0027], and [0029]). The pressure of 0.05 to 0.1 Torr falls within the claimed pressure because 0.01 to 10 mbar is equivalent to 0.0075 to 7.5 Torr. However, Naoki does not teach impregnating an inclusion in the pore to form a functional particle. The Dennison teaches incorporation of an inclusion by solvent phase inversion in order to form functional particles. See claims. Therefore, it would have been obvious for one having ordinary skill in the art to combine the teaching of Naoki and Dennison to make functional particles comprising an inclusion. The graft polymerization method taught by Naoki facilitates the readiness of the particle in

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receiving material to be impregnated in the core because it helps opening the pores and functionalizing the pore surface, and the solvent phase inversion taught by Dennison allows incorporation of inclusion in the porous particle taught by Naoki.

## Response to Arguments

- 4. Applicant's arguments with respect to claims 3, 4, 7, 9-11, and 16-22 have been considered but are moot in view of the new ground of rejection set forth above.
- 5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to H. T. Le whose telephone number is 571-272-1511. The examiner can normally be reached on 10:00 a.m. to 6:30 p.m., Mondays to Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Carol Chaney can be reached on 571-272-1284. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

H. T. Le Primary Examiner

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<sup>\*</sup> Copy of the Naoki patent has been provided by Applicant